### AMENDED IN ASSEMBLY APRIL 4, 2005

CALIFORNIA LEGISLATURE—2005–06 REGULAR SESSION

# ASSEMBLY BILL

No. 929

## **Introduced by Assembly Member Oropeza**

February 18, 2005

An act to add Section 1256.5 to, and to add Article 5 (commencing with Section 114897) to Chapter 6 of Part 9 of Division 104 of, the Health and Safety Code, relating to radiation technology.

#### LEGISLATIVE COUNSEL'S DIGEST

AB 929, as amended, Oropeza. Radiologic technology: radiation exposure.

(1) Under existing law, the State Department of Health Services administers provisions that establish standards for the education, training, and experience of persons who use radiologic technology on human beings.

This bill would require the department, using existing information available from 2 federal sources, to educate the public about the health effects of radiation and how to reduce exposure to radiation, to develop a radiation awareness poster and distribute it to hospitals, and to develop a radiation awareness section on its Web site that includes a downloadable X-ray record card and brochure.

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Existing law provides for the appointment by the department of the Radiologic Technology Certification Committee to serve as consultants to the department in its administration and enforcement of provisions governing standards of education, training, and experience for persons who use X-rays.

This bill would-also require the department to convene an advisory panel committee to provide recommendations on standards for

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measuring and tracking safe radiation dosage and methods for improving provider and patient awareness of radiation exposure benefits and risks, to the department and the Legislature on or before June 2007. The bill would require the department to notify, via E-mail, public health and patient advocates of the meetings of the committee 30 days prior to each meeting date.

(2) Existing law provides for the licensure and regulation of health facilities by the department. A violation of these provisions is a crime.

This bill would require each health facility that uses radiological technology in the examination of patients to post the radiation awareness poster and to print and disseminate, to the extent its resources permit, the radiation brochure required to be prepared by the department.

Because this bill would impose a new requirement on certain health facilities, a violation of which would be a crime, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

- 1 SECTION 1. (a) The Legislature finds and declares all of the 2 following:
- 3 (1) (A) More than 300,000 300,000,000 medical and dental imaging examinations and radiation therapy treatments are administered annually in the United States. Seven out of every 10
- Americans undergo a medical or dental imaging examination or radiation therapy treatment every year in the United States.
  - (B) These procedures are useful in the diagnosis of medical conditions. However, the administration of medical and dental imaging examinations and the effect of these procedures on
- individuals have a substantial and direct effect upon public health
- 12 and safety.

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(C) It is in the interest of public health and safety to minimize unnecessary or inappropriate exposure to radiation from medical and dental radiological procedures.

- (2) In 2005, about 135,125 Californians will be diagnosed with cancer and about 53,785 will die of the disease. Cancer incidence is rising at an alarming rate. *In the United States, one in three women and one in two men will face cancer during their lifetime*. Exposure to radiation such as through X-rays, CT scans, fluoroscopy, and other medical and dental radiological procedures is contributing to-these increasing the high rates.
- (3) A "State of the Evidence," a report jointly released by the Breast Cancer Fund, a nonprofit environmental health organization, and Breast Cancer Action, a nonprofit national education and advocacy organization, states that exposure to ionizing radiation is the best-established environmental cause of human breast cancer. Breast cancer is the most commonly diagnosed cancer among women in California and in the United States. Each year in California approximately 25,000 21,000 women will be diagnosed with the disease and 4,000 will die from it.
- (4) The occurrence of—excess brain tumors after high-dose exposure to ionizing radiation is well established. In According to the National Brain Tumor Foundation's publication, "Essential Guide to Brain Tumors," the treatment of disease with therapeutic ionizing radiation, including X-rays, is a strong risk factor for brain tumors. Studies demonstrate that in adults, dental X-rays have also been shown to increase the risk of meningioma, a benign brain tumor, especially in women.
- (5) In January 2005, the National Toxicology Program classified x-radiation and gamma radiation as known human carcinogens. Although diagnostic radiation is valuable in the practice of medicine and dentistry today, patients have a right to know that procedures involving exposure to radiation entail risks as well as benefits. Radiation is an extremely important and life-saving therapy for many cancer patients. However, it is also important to inform cancer patients about the risks of radiation. Although diagnostic radiation is valuable in the practice of medicine and dentistry today, patients have the right to know that procedures involving exposure to radiation entail risks as well as benefits.

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- (6) To reduce the risk of radiation-related cancer, physicians, 2 dentists, other health care providers, technologists, equipment 3 manufacturers, and the government share the responsibility to 4 minimize radiation exposure of patients. Exposures should be as low as reasonably achievable without sacrificing image quality. 5 Studies have shown that some physicians, dentists, and other 7 health professionals underestimate the risk of cumulative radiation exposure when referring patients for X-rays, scans, and other imaging procedures. In addition, patients are not always fully informed about the potential risk inherent in radiologic 10 imaging. Improving patient awareness and protection during 12 radiologic imaging is a critical step toward reducing a 13 preventable cause of cancer.
  - (7) According to the National Cancer Institute, children are uniquely vulnerable to harm from radiation exposure because they are more sensitive to radiation than adults. Children have a longer life expectancy after exposure, creating a larger window of opportunity for expressing radiation damage. For example, CT scans deliver a much higher radiation dose than ordinary X-rays. Approximately 2 to 3 million CT scan examinations are performed annually on children in the United States. The use of CT scans has increased seven-fold in the past 10 years. Experts estimate that CT scan radiation exposure can be cut by 50 percent during examinations of children without sacrificing diagnostic information.
  - (b) It is the intent of the Legislature in enacting this act to educate health professionals and the public regarding radiation risks and how to reduce exposure.
  - SEC. 2. Section 1256.5 is added to the Health and Safety Code, to read:
  - 1256.5. (a) Every health facility that uses radiological technology in the examination of patients shall post in each of its waiting and examination rooms the radiation awareness poster developed and distributed by the department pursuant to subdivision (b) of Section 114897.
  - (b) To the extent that resources permit, each hospital subject to subdivision (a) shall print, and disseminate in waiting and examination rooms, the radiation awareness brochure developed by the department pursuant to subdivision (c) of Section 114897.

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SEC. 3. Article 5 (commencing with Section 114897) is added to Chapter 6 of Part 9 of Division 104 of the Health and Safety Code, to read:

# Article 5. Radiation Exposure

- 114897. (a) (1) The State Department of Health Services shall educate the public about the health effects of radiation and how to reduce exposure to radiation both the benefits and the risks of radiation so patients can make informed decisions in consultation with their doctors.
- (2) The department shall use existing information available through the United States Food and Drug Administration and the National Cancer Institute to implement this section.
- (b) The department shall develop a radiation awareness poster and distribute it to hospitals.
- (c) The department shall develop a radiation awareness section on its Web site that includes, but is not limited to, a downloadable X-ray record card and brochure in English and Spanish, and, to the extent that funding is available, in other languages.
- (d) (1) The department shall convene an advisory panel composed of experts in radiology and public health and consumer advocates.
- (d) (1) The department shall notify, via E-mail, public health and patient advocates of the department's Radiologic Technology Certification Committee meetings 30 days prior to each meeting date.
- (2) On or before June 1, 2007, the advisory panel department's Radiologic Technology Certification Committee shall prepare and provide to the department and the Legislature recommendations on both of the following:
- (A) Standards for measuring and tracking radiation dosage for each diagnostic patient procedure.
- (B) Methods for improving provider and patient awareness of the *benefits and* risks of radiation exposure.
- SEC. 4. No reimbursement is required by this act pursuant to Section 6 of Article XIIIB of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or

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- 1 infraction, eliminates a crime or infraction, or changes the
- penalty for a crime or infraction, within the meaning of Section
- 3 17556 of the Government Code, or changes the definition of a 4 crime within the meaning of Section 6 of Article XIII B of the
- 5 California Constitution.